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- (i) "Failing to follow these instructions when remanufacturing a locomotive or locomotive engine violates federal law (40 CFR 1068.105(b)), and may subject you to fines or other penalties as described in the Clean Air Act."
- (ii) "Failing to follow these instructions when installing this locomotive engine violates federal law (40 CFR 1068.105(b)), and may subject you to fines or other penalties as described in the Clean Air Act."
- (c) You do not need installation instructions for locomotives you assemble.
- (d) Provide instructions in writing or in an equivalent format. For example, you may post instructions on a publicly available Web site for downloading or printing. If you do not provide the instructions in writing, explain in your application for certification how you will ensure that each assembler is informed of the assembly requirements.
- (e) Your emission-related assembly instructions may not include specifications for parts unrelated to emissions. For the basic mechanical parts listed in this paragraph (e), you may not specify a part manufacturer unless we determine that such a specification is necessary. You may include design specifications for such parts addressing the dimensions and material constraints as necessary. You may also specify a part number, as long you make it clear that alternate part suppliers may be used. This paragraph (e) covers the following parts or other parts we determine qualify as basic mechanical parts:
 - (1) Intake and exhaust valves.
- (2) Intake and exhaust valve retainers.
- (3) Intake and exhaust valve springs.
- (4) Intake and exhaust valve rotators.
- (5) Oil coolers.

§ 1033.135 Labeling.

As described in this section, each locomotive must have a label on the locomotive and a separate label on the engine. The label on the locomotive stays on the locomotive throughout its service life. It generally identifies the original certification of the locomotive, which is when it was originally

manufactured for Tier 1 and later locomotives. The label on the engine is replaced each time the locomotive is remanufactured and identifies the most recent certification.

- (a) Serial numbers. At the point of original manufacture, assign each locomotive and each locomotive engine a serial number or other unique identification number and permanently affix, engrave, or stamp the number on the locomotive and engine in a legible way.
- (b) Locomotive labels. (1) Locomotive labels meeting the specifications of paragraph (b)(2) of this section must be applied as follows:
- (i) The manufacturer must apply a locomotive label at the point of original manufacture.
- (ii) The remanufacturer must apply a locomotive label at the point of original remanufacture, unless the locomotive was labeled by the original manufacturer.
- (iii) Any remanufacturer certifying a locomotive to an FEL or standard different from the previous FEL or standard to which the locomotive was previously certified must apply a locomotive label.
- (2) The locomotive label must meet all of the following criteria:
- (i) The label must be permanent and legible and affixed to the locomotive in a position in which it will remain readily visible. Attach it to a locomotive chassis part necessary for normal operation and not normally requiring replacement during the service life of the locomotive. You may not attach this label to the engine or to any equipment that is easily detached from the locomotive. Attach the label so that it cannot be removed without destroying or defacing the label. For Tier 0 and Tier 1 locomotives, the label may be made up of more than one piece, as long as all pieces are permanently attached to the locomotive.
- (ii) The label must be lettered in the English language using a color that contrasts with the background of the label.
- (iii) The label must include all the following information:
- (A) The label heading: "ORIGINAL LOCOMOTIVE EMISSION CONTROL INFORMATION." Manufacturers/remanufacturers may add a subheading

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to distinguish this label from the engine label described in paragraph (c) of this section.

- (B) Full corporate name and trademark of the manufacturer (or remanufacturer).
- (C) The applicable engine family and configuration identification. In the case of locomotive labels applied by the manufacturer at the point of original manufacture, this will be the engine family and configuration identification of the certificate applicable to the freshly manufactured locomotive. In the case of locomotive labels applied by a remanufacturer during remanufacture, this will be the engine family and configuration identification of the certificate under which the remanufacture is being performed.
- (D) Date of original manufacture of the locomotive, as defined in §1033.901.
- (E) The standards/FELs to which the locomotive was certified and the following statement: "THIS LOCOMOTIVE MUST COMPLY WITH THESE EMISSION LEVELS EACH TIME THAT IT IS REMANUFACTURED, EXCEPT AS ALLOWED BY 40 CFR 1033.750."
- (3) Label diesel-fueled locomotives near the fuel inlet to identify the allowable fuels, consistent with §1033.101. For example, Tier 4 locomotives should be labeled "ULTRA LOW SULFUR DIESEL FUEL ONLY". You do not need to label Tier 3 and earlier locomotives certified for use with both LSD and ULSD.
- (c) Engine labels. (1) For engines not requiring aftertreatment devices, apply engine labels meeting the specifications of paragraph (c)(2) of this section once an engine has been assembled in its certified configuration. For engines that require aftertreatment devices, apply the label after the engine has been fully assembled, which may occur before installing the aftertreatment devices. These labels must be applied by:
- (i) The manufacturer at the point of original manufacture; and
- (ii) The remanufacturer at the point of each remanufacture (including the original remanufacture and subsequent remanufactures).
- (2) The engine label must meet all of the following criteria:

- (i) The label must be durable throughout the useful life of the engine, be legible and affixed to the engine in a position in which it will be readily visible after installation of the engine in the locomotive. Attach it to an engine part necessary for normal operation and not normally requiring replacement during the useful life of the locomotive. You may not attach this label to any equipment that is easily detached from the engine. Attach the label so it cannot be removed without destroying or defacing the label. The label may be made up of more than one piece, as long as all pieces are permanently attached to the same engine
- (ii) The label must be lettered in the English language using a color that contrasts with the background of the label.
- (iii) The label must include all the following information:
- (A) The label heading: "ENGINE EMISSION CONTROL INFORMATION." Manufacturers/remanufacturers may add a subheading to distinguish this label from the locomotive label described in paragraph (b) of this section.
- (B) Full corporate name and trademark of the manufacturer/remanufacturer
- (C) Engine family and configuration identification as specified in the certificate under which the locomotive is being manufactured or remanufactured.
- (D) A prominent unconditional statement of compliance with U.S. Environmental Protection Agency regulations which apply to locomotives, as applicable:
- (1) "This locomotive conforms to U.S. EPA regulations applicable to Tier 0+ switch locomotives."
- (2) "This locomotive conforms to U.S. EPA regulations applicable to Tier 0+ line-haul locomotives."
- (3) "This locomotive conforms to U.S. EPA regulations applicable to Tier 1+ locomotives."
- (4) "This locomotive conforms to U.S. EPA regulations applicable to Tier 2+ locomotives."
- (5) "This locomotive conforms to U.S. EPA regulations applicable to Tier 3 switch locomotives."

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- (6) "This locomotive conforms to U.S. EPA regulations applicable to Tier 3 line-haul locomotives."
- (7) "This locomotive conforms to U.S. EPA regulations applicable to Tier 4 switch locomotives."
- (δ) "This locomotive conforms to U.S. EPA regulations applicable to Tier 4 line-haul locomotives."
 - (E) The useful life of the locomotive.
- (F) The standards/FELS to which the locomotive was certified.
- (iv) You may include other critical operating instructions such as specifications for adjustments or reductant use for SCR systems.
- (d) You may add information to the emission control information label as follows:
- (1) You may identify other emission standards that the engine/locomotive meets or does not meet (such as international standards). You may include this information by adding it to the statement we specify or by including a separate statement.
- (2) You may add other information to ensure that the locomotive will be properly maintained and used.
- (3) You may add appropriate features to prevent counterfeit labels. For example, you may include the engine's unique identification number on the label
- (e) You may ask us to approve modified labeling requirements in this part 1033 if you show that it is necessary or appropriate. We will approve your request if your alternate label is consistent with the requirements of this part.

 $[73\ FR\ 37197,\ June\ 30,\ 2008,\ as\ amended\ at\ 73\ FR\ 59189,\ Oct.\ 8,\ 2008]$

§1033.140 Rated power.

This section describes how to determine the rated power of a locomotive for the purposes of this part.

(a) A locomotive configuration's rated power is the maximum brake power point on the nominal power curve for the locomotive configuration, as defined in this section. See §1033.901 for the definition of brake power. Round the power value to the nearest whole horsepower. Generally, this will be the brake power of the engine in notch 8.

- (b) The nominal power curve of a locomotive configuration is its maximum available brake power at each possible operator demand setpoint or "notch". See 40 CFR 1065.1001 for the definition of operator demand. The maximum available power at each operator demand setpoint is based on your design and production specifications for that locomotive. The nominal power curve does not include any operator demand setpoints that are not achievable during in-use operation. For example, for a locomotive with only eight discrete operator demand setpoints, or notches, the nominal power curve would be a series of eight power points versus notch, rather than a continuous curve.
- (c) The nominal power curve must be within the range of the actual power curves of production locomotives considering normal production variability. If after production begins it is determined that your nominal power curve does not represent production locomotives, we may require you to amend your application for certification under § 1033.225.
- (d) For the purpose of determining useful life, you may need to use a rated power based on power other than brake power according to the provisions of this paragraph (d). The useful life must be based on the power measured by the locomotive's megawatt-hour meter. For example, if your megawatt-hour meter reads and records the electrical work output of the alternator/generator rather than the brake power of the engine, and the power output of the alternator/generator at notch 8 is 4000 horsepower, calculate your useful life as 30,000MW-hrs (7.5 × 4000).

§ 1033.150 Interim provisions.

The provisions of this section apply instead of other provisions of this part for a limited time. This section describes when these provisions apply.

(a) Early availability of Tier 0, Tier 1, or Tier 2 systems. Except as specified in paragraph (a)(2) of this section, for model years 2008 and 2009, you may remanufacture locomotives to meet the applicable standards in 40 CFR part 92 only if no remanufacture system has been certified to meet the standards of